PEARY: AN APPRECIATION

By HERBERT L. BRIDGMAN

A true interpretation of Admiral Peary's almost quarter-century of life work reveals it as but another, more forceful and rigorous presentation of the age-long drama in which man and nature, mind and matter are arrayed against each other. True to classic model, but penetrating much farther than did the ancient dramatists into mysteries physical and spiritual, Peary's drama was a trilogy, each part independent, self-sustaining, and to a degree complete, yet each, as the result proved, related to the others, preparing the way for the next, and all inspired and united by a common idea, a definite objective, and a continuous purpose. Some day, when the psychology of adventurers and particularly of Arctic adventurers comes to be studied and understood, it will be found that Peary's contributions, intellectual and spiritual, to the sum of human knowledge were no less valuable and memorable than were those that have been made in better known and more definitely limited fields of science, and that humanity, no less than his country, is his lasting debtor. Our present path, however, does not lie in that direction.

Peary's Contribution to the Method of Polar Exploration

Nevertheless it is pertinent to say that Peary's contributions, definite at the beginning and emphasized as the years went on and experience conformed to the plan and scope and the method and management of polar field work, were both in immediate and ultimate value second only in importance to his attainment of the Pole itself. Radical and revolutionary to the extreme, fortified only by clear Yankee common sense and the courage of his convictions, Peary, breaking all precedents and relying on his own judgment and a keen perception of the relation of means to ends, discarded at the outset the large party for the small, the ship for the land, and civilized for Eskimo modes of travel. In short he adapted himself and his party to actual conditions and environment, took the Eskimos as friends and instructors, made their customs and dress his own, and at one step mastered all that generations of human experience had to contribute in the great adventure on which he had embarked. Whether American or Eskimo was the base of the composite does not matter. No chemical "third something" ever served its purpose more thoroughly and successfully than the combination thus formed by Peary; and it is certain that to his complete understanding and masterly treatment the potency of the union was wholly due. No less a factor in progress and ultimate success was Peary's intense and dominating personality; under orders from no department or bureau, he

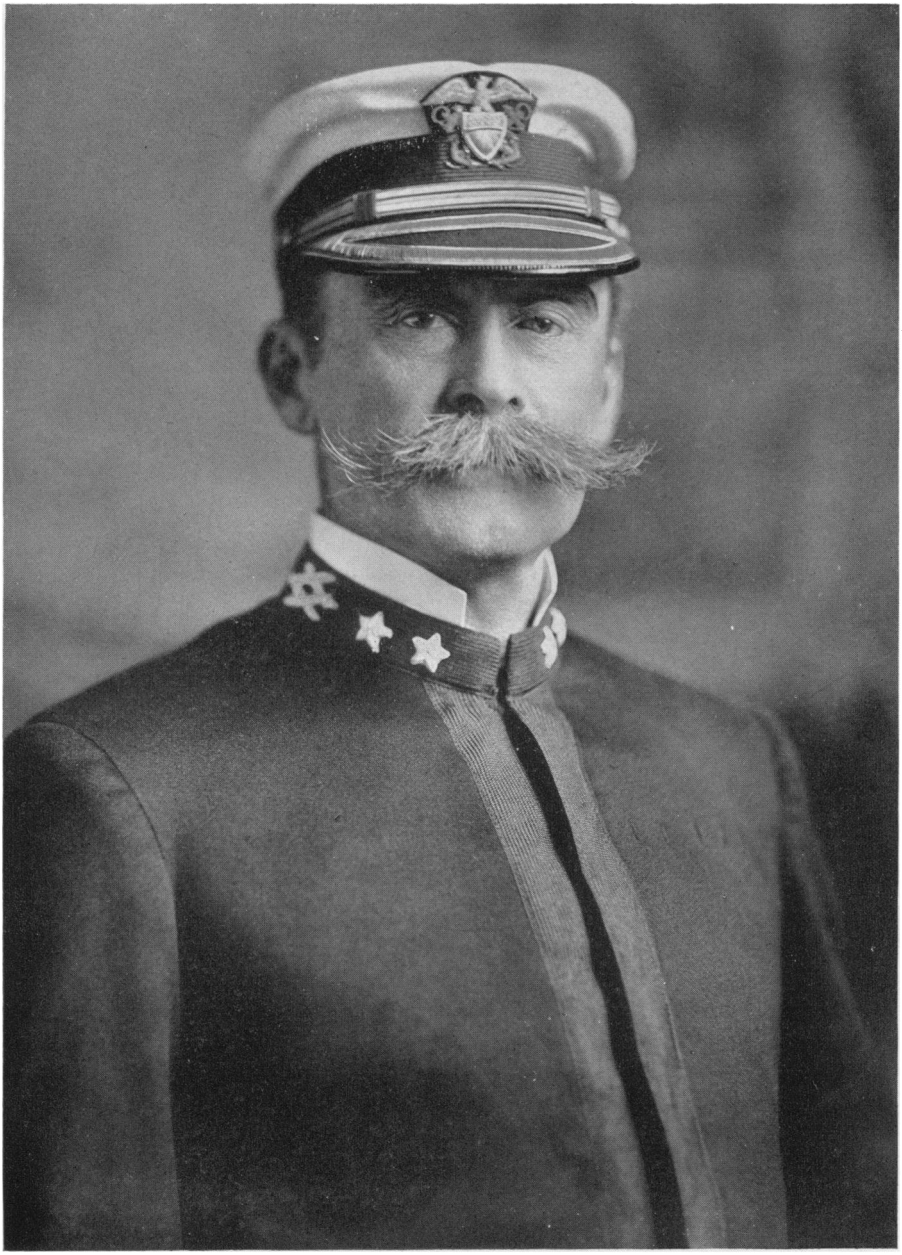
was responsible only to himself and his sense of duty, and, had outside authority intervened, no prophet was needed to foretell the consequences. Not only do Peary's reasoning and methods, including his long and exhausting tests, explain his final success on that ever memorable sixth of April, 1909; but Amundsen at the opposite pole, December 16, 1911, two years and eight months later, Stefansson's five years in the Canadian Arctic Archipelago, the Scott and Shackleton tragedies resulting from adherence to other methods—all are additional proof, if any were needed, not only of the absolute correctness of Peary's methods but of their vast and decisive importance in all the Polar work of the future. The magnetic needle is scarcely a more valuable aid to the navigator than is the equipment which Peary has bequeathed to every one who follows him.

Peary's Expeditions

The Peary drama—"Conquest of the Pole" he prophetically named it almost before it was begun—readily and naturally separates itself into a trilogy. Part One consists of the Inglefield Gulf expeditions and the four traverses of 2,500 miles of the great Greenland ice cap (1891-1895); Part Two, the Peary Arctic Club's first series of expeditions (1898-1902), including the rounding of North Greenland and the elimination of that island as a possible route under any circumstances to the Pole; and Part Three, the Peary Arctic Club's second series of expeditions (1905-1909), including the building of the *Roosevelt*, the advance to 87° 6′ N., the return disabled and almost a floating wreck, and the second voyage (1908-1909), culminating April 6 and announced September 9 in the Battle Harbor radiogram "Stars and Stripes nailed to the North Pole" which electrified the civilized world. Within these few sentences are contained outlines of a story since familiar and always to be familiar to the world, deeds recognized and accorded the highest honors by geographical and other scientific societies, a landmark in history—since it takes the word "unknown" from one part of the globe forever.

Survey of His Scientific Results

A survey of the more definite and distinctive scientific results of Peary's Arctic quarter-century must necessarily be general and in somewhat inclusive terms. The monograph which he forecast in his first volume is yet to be published, and through all his work the dominant note is action and advance rather than study and the refinements of research. Every available hour when the difficult leave from the service could be obtained was devoted to detailed plans for the coming expedition; official or organized co-operation with him or discussion of his material was to a degree beyond his command; and the exhaustive analysis and generous publication of results with which foreign governments, notably France, reward their explorers are yet to come.



ROBERT E. PEARY

Born at Cresson, Pa., May 6, 1856; died at
Washington, D. C., February 20, 1920.

Geographical Results

Geography naturally holds first place in an estimate of Peary's Arctic work, and, in this field, statement and appraisal are not difficult. Recall the maps and conditions of 1891, and the conclusions are convincing and immediate. Kane, Hayes, Hall, Greely, Nares, Markham in the western, and De Long in the eastern hemisphere—each had done his best, even to the supreme sacrifice, and yet had left a continuous record of defeat and disappointment, with the solution of the mystery as distant as ever. The charts ran off indefinitely above 83° or 84° N., and the dotted line which represented the limit of human knowledge had a complete radius of about 500 miles in every direction from the Pole. When Peary left Cape Columbia, February 22, 1906, the entire map of the Polar zone had been recast, and, whether he was to reach the Pole three years later or not, he had completely revolutionized our knowledge of the Arctic. Four traverses of the great Greenland ice cap, 2,500 miles of arduous sledging, had placed the flag of his country where it was nearest Europe in a cairn which he recognized eight years later; Greenland was rounded in 1900; the name of Morris K. Jesup was placed on the most northern land (83°29′) in the world; and the Greenland route was definitely eliminated as a route of Polar advance. In 1906 the coast west from Cape Columbia to Sverdrup's farthest was definitely charted, Cape Thomas Hubbard was located and named, and the illusory Crocker Land was given its brief mythical existence. In view of the disappointing result of the MacMillan Crocker Land expedition eight years later, and as illustrating the exactness and accuracy of Peary's methods, it may be worth while to say that he once declared, in discussing a distant prospect, "I'll never say it's land until I have set my foot on it"; and those who can read his exact words will find that his reports of what he believed was land on that June 24 were made with clear and distinct reservations. It should, too, always be borne in mind that not only was Peary by nature and training fully equipped for discovery but that he fully appreciated the value of accuracy. Experience in determining positions and courses as a navigator on sea and as an engineer and surveyor on land, in measuring distances by comparison and average of estimates and by a mechanical odometer of his own invention, enabled Peary to construct charts and maps that have completely revised and superseded the former coast outlines and cape and island positions of Inglefield Gulf, of both sides of Smith Sound, of Ellesmere Island, and indeed of nearly the whole of the great Arctic sector between the eastern coast of Greenland and the 80th meridian west.

Ethnological Results

Next to his work in geography, Peary's contributions to ethnology doubtless have place. Like Columbus he discovered a race; unlike Columbus he made his "finds" his friends, followers, and comrades. Penn with the Indians on the Schuylkill was no more the guide, philosopher, and

friend than was Peary among the little tribe of Arctic Highlanders. To them he brought appreciation, comradeship, and understanding which, strengthened and tested for more than twenty years, "carried on" to the Pole itself. It was Ooqueah, the Eskimo lad whom Peary first saw as a babe in his mother's hood, who proudly bore the American naval ensign in the historic moment when the Stars and Stripes were "nailed to the North Pole." Animated by keen and genuine human sympathy, Peary from his first contact with old Ikwah in 1891 entered into the daily life and experiences of his dusky comrades, shared their joys and sorrows, supplied them with the things which fitted their actual needs, and mingled kindness and sternness with equal justice, so that not only was his word law but all the tribe's resources in worldly goods and man power were always at his disposal. Peary's word with the Eskimos was always his bond, and always the faithful and deserving were rewarded far beyond the letter of the obligation. Many a time boat crews would go ashore and come back empty-handed from the villagers; the natives had nothing or were willing to sell nothing. Whenever Peary went ashore the boat would return laden; furs, dogs, anything the camp possessed were willingly yielded up not only because the immediate return was generous and satisfactory but because Peary wanted the supplies for use in his work and because nothing was too good for him.

This intimate and practical alliance, though Peary developed the scientific lines, opened up what had hitherto been a closed book. The tribe's history and migrations; what they knew of their origin—Asiatic, eastern, western; all that folklore had to tell of customs, social and domestic; a vocabulary of the Innuit language; numerous physical tests and measurements; and a family register of every man, woman, and child from Peary's first landing in McCormick Bay in 1891 to his last farewell almost on the same spot eighteen years later—all these things became available. In these present days of making over the nations of the world it is encouraging and instructive to find one which has neither laws nor literature, neither money nor religion according to civilized standards, and yet holds the even tenor of its happy way in the consciousness that it needs none of them. When the next problem of dealing with subject or inferior races shall engage the world's attention, the record of Peary's dealing with the northernmost, smallest, and least-known colony of humanity will be found full of suggestion and practical wisdom.

Meteorological and Hydrographical Results

In the fields of meteorology and hydrography Peary's observations and records, as might be expected, take high and definitive rank and, while complete and authoritative discussions are not available, have been of great practical value in the study and explanation of Arctic phenomena.[1] Dur-

[1] See, at the end of this article, the summary of Peary's tidal observations prepared by the U. S. Coast and Geodetic Survey.

ing the first winter J. M. Verhoeff, who never returned, kept the tidal registers off Red Cliff House in McCormick Bay, and two years later similar data with hourly meteorological observations were obtained at Anniversary Lodge. When the *Roosevelt* was ready to depart in 1905 the expedition had a definite status as an adjunct to the U. S. Coast and Geodetic Survey, and its work was prosecuted with the sanction and responsibility of that bureau. At Capes Sheridan, Columbia, and Bryant data were secured which were accepted by competent experts as going far to establish, despite the Crocker Land disappointment, the existence of a large land mass or masses in the yet unknown Arctic area. The possible existence of such land masses is the chief inducement and stimulant for the airplane explorations imminent both from American and oversea bases. For the first time the phenomena of air, of sea temperature, and of tides and currents in this region were accurately measured and recorded and their results added to the sum of exact knowledge.

Geological Results

Peary did not pose as a geologist or botanist. He posed in nothing; but that he had vision and appreciation of the forces and beauties of nature, the following description of Whale Sound is conclusive demonstration.

> Fifty-five miles wide at its mouth, which is divided into two broad channels by a trio of commanding islands, and eighty miles deep, it presents every phase of Arctic scenery, climate, and life—is, in fact, a little Arctic world in itself. Along its shores are to be found low grassy slopes; towering cliffs, massive and solid, carved by the Titan agencies of the savage North into wild forms; wind-swept points where nothing can exist; sheltered nooks where never a violent breath of air penetrates; valleys where luxuriant grass is brightened by myriads of yellow, purple, blue, and white flowers; slopes and plateaus as barren as the surface of a cinder pile; huge glaciers which launch a prolific progeny of bergs into the sea; tiny glaciers which cling tenaciously in the angles of the cliffs; miles and miles of glistening blue, berg-dotted water; and everywhere a few miles back from the shore, the shore of that other silent, eternal, frozen desert sea, the "Great Ice." . . . . . .
>
> Such is this region in summer. In winter it would hardly be recognized. The land is shrouded in snow and shows a ghastly gray in the dim starlight; the sea is white and rigid; no sound is in the bitter air, which is pungent with frost spiculae; light and life have fled; land and sea and sky and air are dark and dead and frozen.[2]

A quarter of a century later Ekblaw, the University of Illinois member of the Crocker Land expedition, and Koch, the geologist of the Rasmussen expedition, renewed and extended the work, so that now, on the base lines established by Peary and clearly outlined in his earlier expeditions before the great adventure and single objective had dwarfed and dominated everything else, the geology of North Greenland is practically established and its formations definitely assigned. In ornithology Peary was on familiar ground. As a lad on the islands and shores of Casco Bay he had collected a complete series of the hawks of that locality, and years afterward dis-

[2] "Northward Over the Great Ice," New York, 1898, Vol. 1, pp. 458 and 476.

played with rekindled youthful pride and enthusiasm to his Eagle Island guests the examples of his skill as a taxidermist. Every variety of the Arctic denizens of the air was known and identified by him, and no treasure of all his expeditions was more highly prized than that of the rare and almost extinct knot. Wherever his wide quest led, it was only second nature for him to find—

> books in the running brooks,
> Sermons in stones, and good in everything.

So, when the auxiliary expeditions of 1894 and 1895 were organizing, what more natural, not to say inevitable, than that two of the most eminent American geologists, Professors Thomas C. Chamberlin and Rollin D. Salisbury of the University of Chicago, should find place on board and welcome on shore for the complete intensive study of the entire coast and of the glaciers, advancing and receding, of every known type surrounding Inglefield Gulf—probably the most highly diversified area of such dimensions in the world for geological survey and explorations. Here could be seen at close quarters, as it were, a world in the making; all the processes of which our habitable zones are the latest familiar result may there be seen in all stages of repose and action; and the observations and deductions of these two collaborators during that Arctic summer have become accepted and recognized authority on many doubtful and difficult points for which adequate data were lacking.

Peary the Man

We, of the present, are too near the man and the fact to assume authority for the final verdict on Peary and his work; but it may be awaited without misgiving. No character and no career lend themselves more readily to analysis, and none need them less than Peary's. Simple, integral, and balanced, the evolution was normal and inevitable, and the development during the twenty-three years of Arctic adventure is an interesting study in psychology. No one should think that chance or accident directed his life work. Athlete, engineer, and navigator, he had an equipment that none in his field before him ever possessed. Upon this broad and substantial foundation he built with each year's added experience a commanding personality which brought to his service all the resources of the Arctic. Eskimos and dogs alike loved and obeyed him; nothing which would serve him but yielded to his demand and his unswerving purpose.

Most interesting, too, in the evolution of the years was the development of the American ideal, of the patriotic impulse, of the consciousness that this self-imposed duty was more than personal ambition or adventure, was a call of country, an exposition of national honor, an acceptance of Nature's challenge. No one acquainted with him could come into his presence and fall under the spell of his reserved, restrained personality—for he was not a man given to many words—without a distinct impression of serious

purpose and of high patriotic resolve. It is in this character of the typical, fearless, unflinching American, first and always, of which the explorer was but a phase of expression, that he takes his place in the memory of those who knew him well and loved him best. To catalogue his achievements or cast up his account with science is unnecessary. He has written of these things in fullness of detail, and what he has written can be read by all. Not less will his example, of which he could not write, and our memories of him be possessions forever.

I drink to that great Inn beyond the grave.
If there be none, the Gods have done us wrong.
Ere long I hope to chant a nobler stave
And in some Mermaid Inn beyond the grave
To quaff the best of Earth that Heaven can save;
Red wine, like blood; deep love of friends, and song.
I drink to that great Inn beyond the grave
And hope to meet my golden lads ere long.
(Alfred Noyes, "Tales of the Mermaid Inn")

Summary of Peary's Tidal Observations

(Prepared for this article by the U. S. Coast and Geodetic Survey)

During his last Arctic expedition in 1908-1909, Peary secured tidal observations at five stations. These observations consisted of continuous hourly readings of the height of the tide, day and night, supplemented by more frequent readings near the times of high and low water. The locations of these stations together with the periods during which the observations were made and the length of record secured are given in the following table.[3]

Table I—Locations and Periods of Peary's Tidal Observations

Station	Latitude North	Longitude West	Period of Observations	Length of record
Cape Sheridan.....	82° 27′	61° 21′	Nov. 12, 1908 to June 30, 1909	231 days
Cape Columbia.....	83° 05′	69° 35′	Nov. 16, 1908 to Dec. 14, 1908	29 "
Cape Bryant.....	82° 21′	55° 30′	Jan. 16, 1909 to Feb. 13, 1909	28 "
Fort Conger.....	81° 44′	64° 45′	June 10, 1909 to June 25, 1909	15 "
Cape Morris Jesup.....	83° 40′	33° 35′	May 13, 1909 to May 23, 1909	10 "

These observations, because of the care, thoroughness, and understanding with which they were made, furnish definitive tidal knowledge for that stretch of the Arctic coast. They prove that the tides along the northern coasts of Grant Land and Greenland differ in many respects from what had formerly been accepted. While there are long stretches of the Arctic coast where more tidal information is urgently desired, Peary's tidal observations leave little to be desired between Cape Morris Jesup and Cape Columbia.

As indicating the care with which the observations were made, mention may be made of the fact that out of a total of more than 300 days of hourly observations, under the trying conditions of Arctic weather, breaks in the continuous records due to all causes total but 36 hours.

[3] The observations themselves (hourly tide heights and time and height of high and low waters) are published in R. A. Harris: Arctic Tides, U. S. Coast and Geodetic Survey, Washington, D. C., 1911, pp. 10-30. —Edit. Note.

The series of observations of 15 days secured by Peary's party at Fort Conger has a further interest in that some twenty-seven years previously another noted American explorer had made tidal observations there. It was between 1881 and 1883 that the party under Lieutenant (now Major General) A. W. Greely secured a long and valuable series of tidal observations at Fort Conger. The remarkably close agreement in the results derived from the two series is brought out in the comparison given below.

TABLE II—COMPARISON OF GREELY'S AND PEARY'S OBSERVATIONS

OBSERVATIONS	HIGH WATER INTERVAL	LOW WATER INTERVAL	MEAN RANGE	TIDAL HOUR
Greely's, 1881-83.....	11 h. 33 m.	5 h. 20 m.	4.3 ft.	3.48
Peary's, 1909.....	11 h. 35 m.	5 h. 15 m.	4.1 ft.	3.51

In a previous expedition Peary had secured tidal observations at Cape Sheridan from November 3 to December 4, 1905. It is interesting to compare the results obtained from this short series with the results from the longer series secured by Peary in 1908-1909 at the same place, since it is indicative of the high quality of his tidal observations.

TABLE III—COMPARISON OF A SHORT AND A LONG SERIES OF OBSERVATIONS BY PEARY AT THE SAME LOCATION

YEAR	LENGTH OF OBSERVATIONS	HIGH WATER INTERVAL	LOW WATER INTERVAL	MEAN RANGE	TIDAL HOUR
1905.....	1 month	10 h. 30 m.	4 h. 09 m.	1.8 ft.	2.23
1908-09.....	7½ months	10 h. 31 m.	4 h. 14 m.	1.8 ft.	2.24

Peary's observations are the most northerly tidal observations ever made and constitute an important addition to our knowledge of the tides of the Arctic Ocean.